

**Notice of Allowability**

Application No.

10/729,873

Examiner

Ryan M. Stiglic

Applicant(s)

FLOMAN, MATTI

Art Unit

2112

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date ____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                    | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|   | 9. <input type="checkbox"/> Other ____   |

### DETAILED ACTION

1. Claims 1-22 are pending and have been examined.
2. Claims 1-22 are allowed.

### *Allowable Subject Matter*

3. The following is an examiner's statement of reasons for allowance:

The Examiner has done a thorough search and found no prior art of record, alone or in combination, that teaches or fairly suggests the limitation, "...said memory controller divides the capacity of said bus into as many portions as there are connected memory components, allocates each portion to another group of said interface pins to which a separate memory components is connected..." The Examiner has found the following prior art that most closely describes the prior art:

- Both Wertheim et al. and Nozuyama disclose dynamically dividing/partitioning a system bus to reduce power consumption. Both inventions relate to dividing (by way of switches) a bus into (say) three divisional buses and only connecting the sub-divisional buses required to complete a bus transaction. The claimed novelty comes from only powering the portions of the system bus that are required for a transaction while leaving the other portions not used during a transaction unpowered. However, neither Wertheim nor Nozuyama disclose dividing the capacity of said bus into as many portions as there are connected components, therefore neither reference can be considered to fairly teach and/or suggest each and every limitation of the claimed invention.

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- Greenfield appears to disclose dynamically dividing the capacity of a system bus into as many portions (physical buses 0-2) as there are connected memory components (memory 0-2) but Greenfield instead teaches having two or more physical buses with divided banks of memory. The memory components are preferably divided according to the number of physical buses (col. 3, ll. 10-65). Therefore it is apparent that Greenfield does not fairly teach and/or suggest dividing the capacity of the (virtual) bus into as many portions as there are connected memory components, Greenfield appears to teach the opposite.
- Vandecappelle et al. disclose optimizing resource (memory component) interconnection by partitioning a data-path into separable data conduits. Vandecappelle disclose determining an optimal resource interconnection prior to system completion (i.e. during design). Since Vandecappelle does not fairly teach or suggest "...said memory controller divides the capacity of said bus into as many portions as there are connected memory components, allocates each portion to another group of said interface pins to which a separate memory components is connected..." it can not be considered to teach and/or fairly suggest each and every limitation of the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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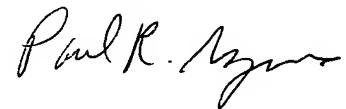
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M. Stiglic whose telephone number is 571.272.3641. The examiner can normally be reached on Monday - Friday (6:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571.272.3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMS



**PAUL R. MYERS  
PRIMARY EXAMINER**